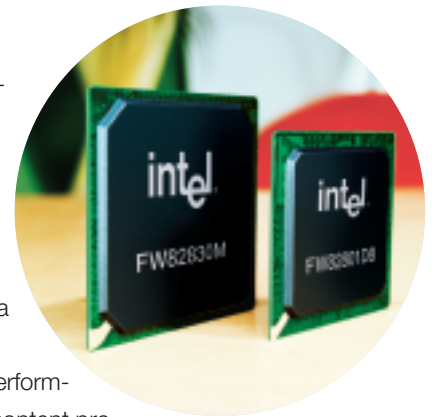


Intel® 830M4 Chipset for Media Centric Applications and Intel® 830M4 Chipset Development Platform

Product Overview

The Intel® 830M4 chipset adds high-performance Intel® integrated graphics and the flexible peripheral connectivity of USB 2.0 to the Intel Consumer Electronics (CE) roadmap. This versatile chipset is validated with broad range of Mobile Intel® Celeron® processors, creating the foundation for a flexible, high-performance and scalable platform solution for IP-Digital Set Top Box (IP-DSTB), Digital Media Recorder (DMR) devices and other CE clients. Platforms based on the Intel® 830M4 chipset provide the processing performance needed for emerging software-based video codecs, content protection solutions and personal video recorder (PVR) capabilities, while opening the door to new flexible digital home networking models and new generations of digital media services.



The Intel® 830M4 Chipset Development Platform is available to accelerate CE designs based on the Intel® 830M4 chipset. When combined with BIOS, operating system and application software, this single-board platform provides hardware and software developers with a validated platform for future IP-DSTB, Digital Media Recorder (DMR), or other (CE) devices and software solutions.

Intel® 830M Chipset Product Highlights

- Validated with the following Intel® processors:
 - Low Voltage Intel® Celeron® processor (Micro-FC-BGA) 733/866 MHz
 - ULV Intel® Celeron® processor (Micro-FC-BGA) 733/800 MHz
 - Mobile Intel® Celeron® processor (Micro-FC-PGA 1.06/1.26 GHz (133MHz PSB only)
- Support for up to 1 GB of 133 MHz SDRAM (2 DIMMS)
- Support for up to 6 USB 2.0 ports
- Two Ultra ATA/100/66/33 IDE channels
- Integrated 10/100 LAN support
- Support for up to 6 PCI slots
- Integrated graphics for vivid 2D and 3D graphics
- One analog and two digital display ports
- AC'97 2.3 controller
- Soft DVD MPEG-2 playback with hardware motion compensation for lifelike audio and video

Intel® 830M4 Chipset Development Platform Block Diagram

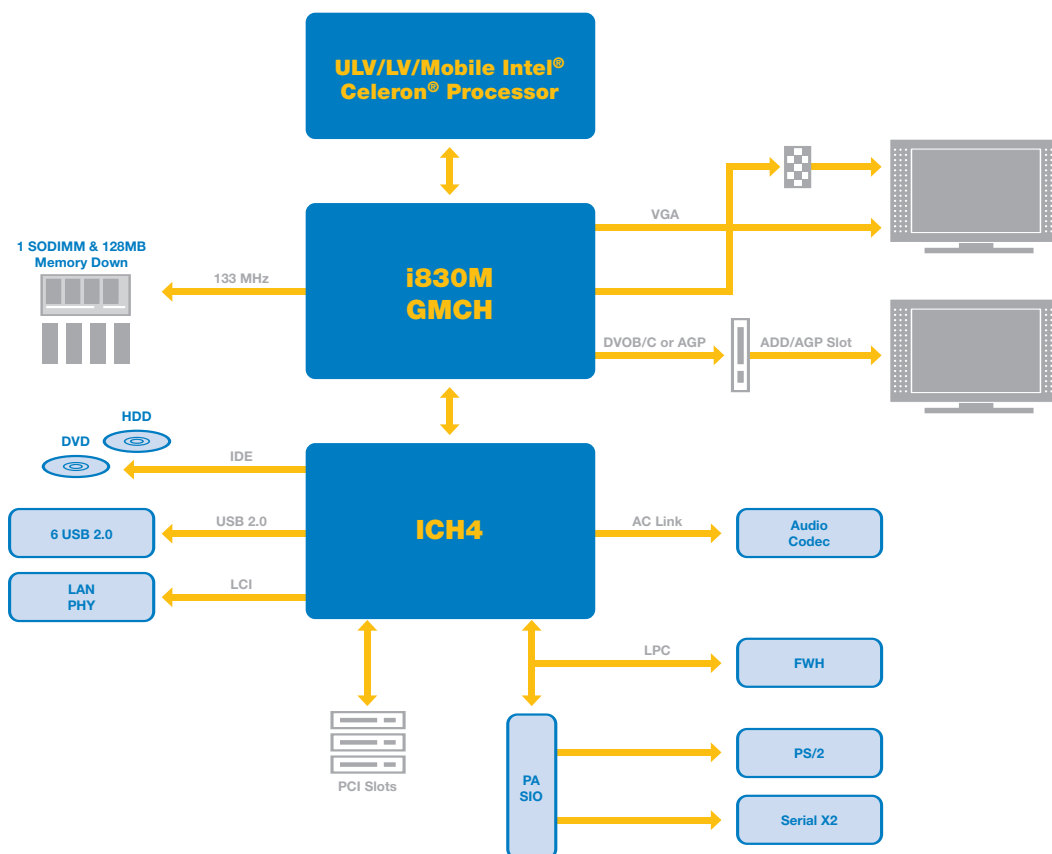


Figure 1 — The Intel® 830M4 Chipset Development Platform helps accelerate the implementation of next-generation CE devices and software solutions.

Validated with Intel® Processors

The Intel® 830M4 chipset supports Low Voltage Intel® Celeron® processor (Micro FC-BGA), Ultra Low Voltage Intel® Celeron® processor (Micro FC-BGA), and Mobile Intel® Celeron® processor (Micro FC-PGA).

These Intel® processors use advanced 0.13-micron process technology with copper interconnects and offer high performance and low power consumption. Supported processor speeds range from 733 MHz to 1.26 GHz, providing customers the ability to choose the right level of processing power for their media centric applications and devices.

Intel® Integrated Graphics

The Intel® 830M4 chipset supports Intel® integrated graphics capability, providing enhanced graphics performance over previous generations of Intel® products used in dedicated consumer electronics devices, while helping to minimize chip count and bill-of-materials costs.

Flexible I/O

The Intel® 830M4 chipset supports the I/O and peripheral connectivity requirements of consumer electronics devices. The chipset supports up to six USB 2.0 ports, two Ultra ATA/100 (IDE) channels for disk drives and storage devices, in addition to integrated 10/100 LAN support. High performance I/O coupled with superior display quality and control make the Intel® 830M4 chipset an ideal choice when designing advanced media centric devices.

Intel® 830M4 Chipset Development Platform

The Intel® 830M4 Chipset Development Platform helps accelerate designs based on the Intel® 830M4 chipset and selected Intel® Celeron® processors. When combined with operating system (OS), BIOS and application software, the platform enables developers working in the fast-changing IP-DSTB and DMR market segments to quickly implement designs based on the proven Intel® Architecture development environment.

The base configuration provides CE device manufacturers with the flexibility they need to quickly adapt to the requirements of Service Providers by adding a variety of processors and flexible I/O options for multiple input, tv encoder, and storage devices. The development platform offers options for use of the AGP Digital Display (ADD) interface, AGP interface, and a DVO interface to allow maximum capabilities for the CE device manufacturers' development with various tv encoder or graphics cards. This scalable platform helps manufacturers minimize overall cost by providing the performance to handle video decoding and other functionality in software, helping to simplify hardware designs and minimize bill-of-materials costs.

Minimize Time-to-Market

Design schematics, core OS and driver support are available to reduce time-to-market. Intel works with hardware and software vendors to support rapid design implementation.

Choice of Operating Systems

The Intel® Architecture software environment is familiar to most programmers. The Intel® 830M4 Chipset Development Platform is validated with the Microsoft® Windows CE.net and the Linux® operating systems, providing developers with a significant time-to-market advantage.

Intel® 830M4 Chipset Development Platform Highlights:

- Mobile Intel® Celeron® processors
- Intel® 830M4 chipset with Intel® integrated graphics
- Intel® 82801DB (ICH4) I/O controller with integrated LAN, USB 2.0 and Ultra ATA/100 support
- Support for up to 512 MB of PC133 SDRAM

Audio and Video Components

- TV output via ADD card with Focus Enhancements* FS454 PC-to-Video Scan Converter
- SigmaTel® AC'97 STAC9756 supporting stereo audio output

Video Connectors

- S-Video out via ADD card
- Composite video out via ADD card
- VGA connector

Audio Connectors

- L/R RCA audio connectors
- S/PDIF (optical and coaxial)

Peripheral Connectors

- 6 USB 2.0 ports
- 2 RJ-45 10/100 Ethernet ports
- 1 RS-232 header with connector

Intel® 830M4 Chipset Development Platform

For information on how to obtain the Intel 830M4 Chipset Development Kit contact your Intel representative.

Intel® 830M4 Chipset Linecard

Product	Product Code	Package	Features
Graphics and Memory Controller Hub (GMCH)	FW82830M	625 PBGA	-Intel® Accelerated Hub Architecture -2D/3D Intel® integrated graphics -Support for up to 1 GB PC133 SDRAM
I/O Controller Hub (ICH)	FW82801DB	421 MBGA	-Direct connection to the GMCH with Intel's accelerated hub architecture -Support for 32-bit PCI -2 IDE controllers with ATA/100 -6 USB 2.0 ports -AC'97 controller with 6 channel sound -Integrated LAN connect interface

Intel Access

Developer's Site	developer.intel.com
Embedded Intel® Architecture Home Page	www.intel.com/design/intarch
Intel® Technical Documentation Center	www.intel.com/go/techdoc (800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada) International locations please contact your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

**For more information, visit the Intel Consumer Electronics home page at:
www.intel.com/go/consumerelectronics**

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